

IN THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

1-190. (canceled)

191. (previously amended) An implantable brachytherapy treatment system for treating a target tissue region within a breast, comprising:

at least one elongate tubular member comprising a proximal end, a distal end sized for introduction through tissue of a breast to a target tissue region, and a first lumen extending between an opening in the proximal end and the distal end;

a strip of material extending along a therapy delivery portion between the proximal and distal ends of the tubular member within the tubular member adjacent the first lumen, the strip of material substantially fixed along the therapy delivery portion and having a cross-section defining a width extending transversely relative to the first lumen and a height orthogonal to the width, the height being smaller than the width; and

a radiation source receivable in the first lumen of the tubular member for delivering radiation therapy to the target tissue region after the distal end of the tubular member has been introduced into the target tissue region,

wherein the support member biases the tubular member for introduction through tissue in a straight configuration and deployment in a curved configuration within or around the target tissue region.

192. (currently amended) The system of claim 191, ~~wherein the~~ wherein the at least one tubular member comprises heat shrink tubing.

193. (previously presented) The system of claim 191, wherein the strip of material is enclosed within the tubular member.

194. (previously amended) The system of claim 191, wherein the tubular member comprises a second lumen extending along the therapy delivery portion adjacent the first lumen, and wherein the support member is substantially fixed within the second lumen.

195. (previously presented) The system of claim 191, wherein the support member is configured for attenuating or shielding radiation to surrounding tissue.

196. (previously presented and withdrawn) The system of claim 191, wherein the strip of material has curvature in its relaxed state, the system further comprising a cannula for constraining the tubular member in the straight configuration for introduction through tissue.

197. (previously presented) The system of claim 191, wherein the radiation source comprises an afterload HDR cable.

198. (previously presented and withdrawn) The system of claim 191, wherein the support member has a flat cross-section.

199. (previously presented) The system of claim 191, comprising a plurality of tubular members including the at least one tubular member, the plurality of tubular members configured for simultaneous introduction through tissue of a breast to a target tissue region in a straight configuration and deployable in a curved configuration within or around the target tissue region.

200. (currently amended) The system of claim 191, wherein the tubular member and support member comprise a ~~comprises a plastic~~ co-extrusion.

201. (previously presented) The system of claim 191, wherein the support member has an arcuate cross-section.

202. (previously presented) The system of claim 201, wherein the support member is disposed adjacent the first lumen such that the width of the support member extends only partially around the first lumen.